



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/559,504  | 05/22/2006  | Hans Zoerb           | CGL030204US01       | 3827             |
| 46395 7590 10/13/2009<br>CARGILL, INCORPORATED<br>P.O. Box 5624<br>MINNEAPOLIS, MN 55440-5624 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| SMITH, PRESTON  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 1794  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
| 10/13/2009  |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/559,504

**Applicant(s)**

ZOERB, HANS

**Examiner**

PRESTON SMITH

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-6,9-11,14-16 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,9-11,14-16 and 19-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 02/20/2009.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-2, 5-6,10-11,15-16, 20-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Takahiko Mandai, US-Patent 5,919,668 in view of Jeffery Wayne Liebrecht, US-Patent 6,106,874 and as evidenced by whey vs. soy protein NPL.**

**Regarding claims 1-2, 4-6,9-11,14-16, 19-23, Mandai teaches mixing a soybean peptide in 40% solution with trehalose followed by drying the mixture at 50 C (which would substantially dehydrate it) (column 37, lines 28 - 33). Mandai then teaches adding**

the mixture to flavored nutritional beverages such as parenteral liquid foods (column 37, lines 35-40). Since trehalose is mixed with the soybean peptide in 40% solution (column 37, line 30), it is considered to be substantially distributed throughout the soybean peptide in 40% solution. Mandai does not teach the use of whey protein however whey protein and soy peptides are known to be an important source of proteins in the human diet. Although Mandai does not teach whey protein, Liebreacht teaches the use of whey protein isolates (considered to be native since there is not mention of the proteins being denatured) in the creation of a nutritional beverage (column 12, lines 65-67). Whey protein is known to be very high in biological value and thus it is highly desired by athletes. One of ordinary skill in the art at the time of the invention would have been motivated to substitute whey protein for soy peptide in order to produce a beverage that is very high in biological value (see whey protein vs soy protein NPL). This beverage would be appealing to an athlete and thus would enhance the value of the invention taught by Mandai.

Mandai also teaches that trehalose has a favorable taste masking effect and taste improving effect (column 11, line 41-42). It is not known if the trehalose of Mandai is added in amounts to sufficiently mask the taste of the soybean peptide in 40% solution (column 37, lines 28 - 33) however it would have been obvious to one of ordinary skill in the art at the time of the invention to add trehalose in amounts that would mask the taste of the soybean peptide in 40% solution in order to allow the beverage to which it is being added to retain its original taste and thus it would have been obvious to one of ordinary skill in the art to add trehalose in sufficient quantities to

mask the whey protein of the composite invention of Mandai in view of Liebreacht, in order to produce a beverage that is unaltered in taste by the addition of the "bitter/cardboard tasting" whey protein.

**Regarding claims 24-25 and 28-29**, it is not clear if the trehalose and whey proteins are in a weight ratio of 50:50 (or optionally between 5:95 and about 99:1) however it would have been obvious to one having ordinary skill in the art at the time of the invention to maintain similar amounts of trehalose and whey protein in order to ensure a sufficient masking of the taste of the protein in order to ensure the mixture has little effect on the overall taste of the beverage. Thus, one of ordinary skill in the art would have found maintaining the weight ratios of the two components roughly equal in order to achieve an optimum masking effect.

**Regarding claims 26-27**, it is not clear if the amount of protein would make up about 0.5% to about 20% of the beverage however adjusting the protein amount would determine how protein enriched the beverage is and thus would depend on the audience the beverage would be provided to. Consumers such as body builders would desire a beverage having a higher protein content whereas consumers who are not body builders would not. Additionally, the amount of protein added would greatly affect the cost of the beverage and thus this would affect how much protein one of ordinary skill in the art desired to add to the beverage. It is thus considered that one of ordinary skill in the art would have found the claimed range obvious and discoverable through

routine experimentation in an attempt to adjust the protein content in order to meet the desire of consumers while at the same time maintaining the cost to a desirable level.

### ***Response to Arguments***

Applicant's arguments filed 07/07/2009 have been fully considered but they are not persuasive.

Applicant argues (see bottom of pages 9-10) that Mandai does not teach that the trehalose will protect the proteins during heat treatments prior to and during the drying process and applicant further states that adding trehalose to proteins prior to drying reduces the denaturation of the proteins. This argument is not persuasive because Mandai teaches adding trehalose to the solution containing the protein prior to drying it as pointed out in the last office action (column 37, lines 28-33). Additionally, it is noted that the features upon which applicant relies (the trehalose protecting the proteins during heat treatments prior to and during the drying process) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **PRESTON SMITH** whose telephone number is (571)270-7084. The examiner can normally be reached on Mon-Th 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Drew E Becker/  
Primary Examiner, Art Unit 1794

prs